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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/712,227	11/15/2000	Noriko Kawai	1035-291	8669

7590 06/05/2002
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EXAMINER

CUNEO, KAMAND

ART UNIT	PAPER NUMBER
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2827

DATE MAILED: 06/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

9/7/2227

Applicant(s)

Examiner

Cuno

Group Art Unit

2827

--The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address--

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 3/13/02
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-7 is/are pending in the application.
- Of the above claim(s) 1-3, 7-17 is/are withdrawn from consideration.
- ☐ Claim(s) is/are allowed.
- ☒ Claim(s) 4-6 is/are rejected.
- ☐ Claim(s) is/are objected to.
- ☐ Claim(s) are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) _____
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) 2, 6
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

Office Action Summary

DETAILED ACTION

Election/Restriction

1. Applicant's election of claim 4-6 with traverse in Paper No. 5 is acknowledged. The traversal is on the ground(s) that

examiner must ensure that the species are patentably distinct,

that there is no difference between species B and C,

and that claims 4-6 belonging to species A are encompassed by the other species.

This is not found persuasive. First, examiner's assessment is that the species are patentably distinct. Second, while applicant alleges that species B and C are the same, applicant himself lists the differences between these species in paragraph 1 of page 2 of the response. Last, that claims 4-6 may be encompassed by other species does not render the identification of species incorrect.

If a generic claim is indicated as allowable, dependent claims complying with the provisions section 112 will also be allowed.

The requirement is still deemed proper and is therefore made FINAL.

Treatment of Claims Based on Prior Art

2. 35 USC 103(a) states:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Obviousness under 35 USC 103(a) is determined against a background established by the factual inquires set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), which are

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summarized in items 1-4 below.

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 USC 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 USC 103(c) and potential 35 USC 102(f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 4-6 are rejected under 35 USC 103(a) as being unpatentable over Eichelberger Eichelberger et al. (US 5452182, hereafter Eichelberger).

First Interpretation, reading on claims 4-5: Eichelberger discloses substrate (14), first wiring (34) and second wirings (those mentioned at line 45 of column 9), first protective film (36) and second protective film (that mentioned at line 46 of column 9), terminals (35). The thickness of these films is less than half the thickness of the substrate (14).

Eichelberger discloses the claimed invention except for specifying the material of the films and or how they are attached (does not disclose that they are attached by adhesive). Nevertheless, Eichelberger does disclose with respect to similar films (32) that they are polymer films and are

attached by adhesive, column 7 at lines 58-62.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use a polymer film and attach it by adhesive as the protective films of Eichelberger to provide a flexible covering film, because such a construction is known and taught with respect to similar layers (32).

Second interpretation, reading on claims 4-6: Eichelberger discloses substrate (14), first wiring (34) and second wirings (those mentioned at line 45 of column 9), first protective film (32) and second protective film (that mentioned at line 46 of column 9), terminals (the opening in (32) that allows connection of (34) with chip (20)). The thickness of these films is less than half the thickness of the substrate (14).

Eichelberger specifies that (32) is a polymer film and is adhered to the substrate (14), column 7 at lines 58-62.

Eichelberger discloses the claimed invention except for specifying the material of the second film or how it is attached (does not disclose that it is attached by adhesive).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use a polymer film and attach it by adhesive as the second protective film of Eichelberger to provide a flexible covering film, because such a construction is known and taught with respect to similar layers (32).

With respect to claim 6, the terminals that attach to chip (20) are provided only in the first wiring layer and the ends of the protective films are located as claimed.

Related Prior Art

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5. The following references are considered pertinent to the present application.

Santo discloses a substrate, wiring (1), terminal (1a) and film (3).

Inaba et al. discloses a substrate with wirings on the top and bottom and protective films (7) covering the wirings.

Closing

6. Any inquiries related to the examination of this application should be directed to Ex. K. Cuneo at (703) 308-1233 or her supervisor SPE David L. Talbott at (703) 305-9883. Inquiries of a general nature should be directed to the receptionist of Group 2800 at (703) 308-0956. The fax numbers for Group 2800 are (703) 308-7722 and 7724.



K. Cuneo
Primary Examiner
June 3, 2002